# Nevada Bureau of Mines and Geology SPECIAL PUBLICATION P-19

# **Major Mines of Nevada 2007**

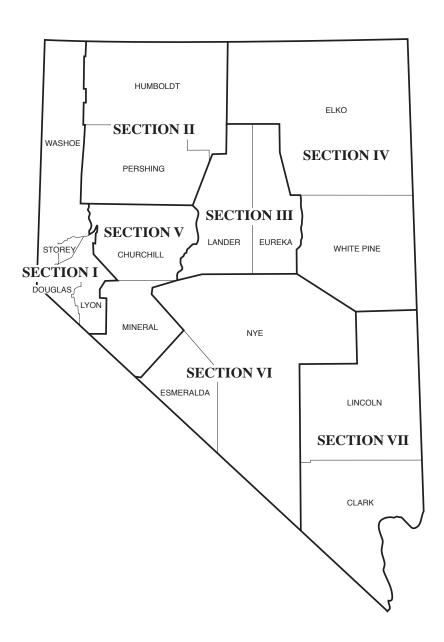
# Mineral Industries in Nevada's Economy

By Doug Driesner and Alan Coyner
The Nevada Division of Minerals

# 2008

This is the nineteenth of an annual series of summary reports on major mines of Nevada. Sand and gravel operations are not included. Information on employment and production for the calendar year 2007 was provided by the individual mine operators. The Nevada Division of Minerals maintains a complete register of Nevada mines. For further information, contact them at 400 W. King, Suite 106, Carson City, Nevada 89703 or call (775) 684-7040, fax (775) 684-7052, or visit their Web site at http://minerals.state.nv.us.



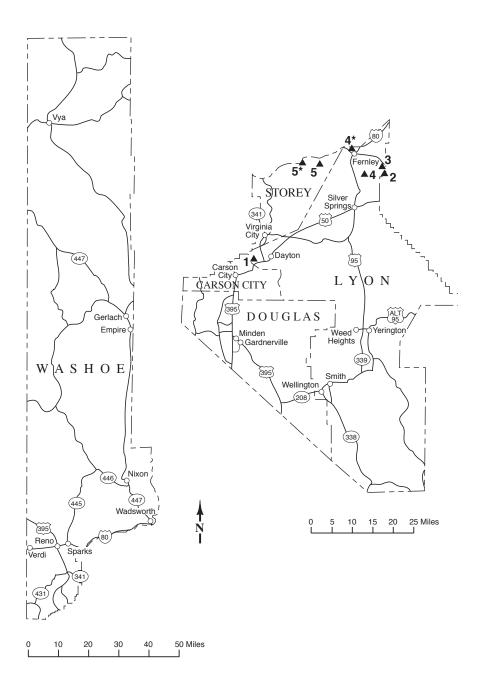


# **Contents**

# **Major mines**

```
Section I
              Lyon County 5
              Storey County 5
        Section II
              Humboldt County 7
              Pershing County 8
        Section III
              Eureka County 11
              Lander County 12
        Section IV
              Elko County 15
              White Pine County 15
        Section V
              Churchill County 17
              Mineral County 17
        Section VI
              Esmeralda County 19
              Nye County 19
        Section VII
              Clark County 21
              Lincoln County 21
Summary of 2007 production 22
Economic impacts of mining
        in Nevada—2007 23
Major mines, oil fields, and
        geothermal plants, 2007 (map) 27
```

Index 28



# Section I

# **Lyon County**

#### Adams Claim Gypsum Mine (1)

Operator:

Art Wilson Co.
P.O. Box 20160
Carson City, NV 89702-1160
775-882-0700 Fax: 882-0790
Company employees: 52

Production:

Gypsum - 140,528 tons Limestone

#### Celite Diatomite Mine (2)

Operator:

World Minerals, Inc.
100 Front Street
Fernley, NV 89408
775-575-2536 Fax: 575-1570
Company employees: 16
Production:
Diatomite

#### Hazen Pit (3)

Operator:

EP Minerals, LLC 640 Clark Station Rd. Sparks, NV 89434 775-824-7700 Fax: 824-7715 Company employees: 2

Production:

Diatomite

# NCC Limestone Quarry (4) and Mill (4\*)

Operator:

Nevada Cement Co. P.O. Box 840 Fernley, NV 89408

775-575-2281 Fax: 575-4387 Company employees: 126

Production:

Limestone/Clay

# **Storey County**

## Clark Mine (5) and Mill (5\*)

Operator:

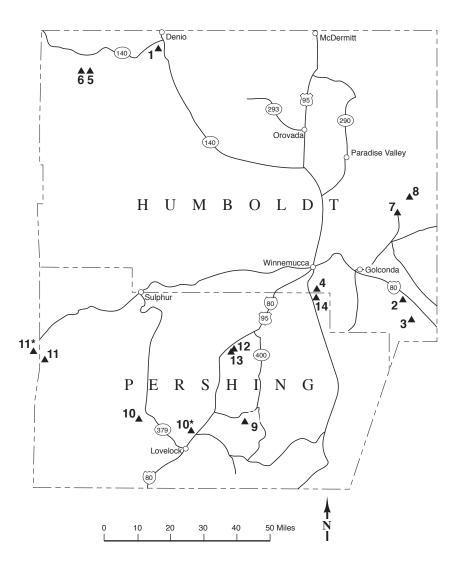
EP Minerals, LLC 640 Clark Station Rd. Sparks, NV 89434 775-824-7700 Fax: 824-7715 Company employees: 66

Production:

Diatomite



Adams Claim Gypsum Mine (Mike Visher photo).



# **Section II**

## **Humboldt County**

#### Ashdown Mine (1)

Operator:

Ashdown Project, LLC 1675 E. Prater Way #102

Sparks, NV 89434

775-853-4919 Fax: 853-5010

Company employees: 68 Contract employees: 2

Production:

Molybdenite - 412,856 pounds

#### Lone Tree Mine (2)

Operator:

Newmont Mining Corp.

P.O. Box 388

Valmy, NV 89438

775-635-6423 Fax: 635-6460 Company employees: 117

Production:

Gold - 182,768 oz Silver - 37,172 oz

#### Marigold Mine (3)

Operator:

Goldcorp, Inc.

P.O. Box 160 Valmy, NV 89438

775-635-2317 Fax: 635-2551

Company employees: 213 Contract employees: 35

Production:

Gold - 140,840 oz Silver - 2.233 oz

#### MIN-AD Mine and Mill (4)

Operator:

MIN-AD, Inc.

P.O. Box 22

Winnemucca, NV 89446 775-623-5944 Fax: 623-9028

Company employees: 22

Contract employees: 4

Production:

Dolomite

#### Rainbow Ridge Opal Mines (5)

Operator:

Rainbow Ridge Opal Mines, Inc.

P.O. Box 97

Denio, NV 89404

775-941-0270 (summer)

541-548-4810 (winter)

Production:

Precious opal

#### Royal Peacock Opal Mine (6)

Operator:

Walter Wilson

P.O. Box 165

Denio, NV 89404

775-941-0374 (summer)

775-272-3201 (winter)

Production:

Precious opal

### **Turquoise Ridge Joint Venture (7)**

Operator:

Barrick Gold Corporation

HC66 Box 220

Golconda, NV 89414

775-529-5001 Fax: 529-0753 Company employees: 311

Contract employees: 92

Production:

Gold - 251,133 oz

#### Twin Creeks Mine (8)

Operator:

Newmont Mining Corp.

P.O. Box 69

Golconda, NV 89414

775-623-4300 Fax: 635-4602

Company employees: 543

Production:

Gold - 488,457 oz

Silver - 99,344 oz

# **Pershing County**

#### **Coeur Rochester Mine (9)**

Operator:

Coeur Rochester, Inc.

P.O. Box 1057

Lovelock, NV 89419

775-273-7995 Fax: 273-7423

Company employees: 38

Production:

Gold - 50,408 oz

Silver - 4,614,779 oz

### Colado Mine and Plant (10), Mill (10\*)

Operator:

EP Minerals, LLC

150 Coal Canyon Road

Lovelock, NV 89419

775-824-7540 Fax: 824-7582 Company employees: 117

Production:

Diatomite, Perlite

# Empire Mine (11), Mill (11\*)-in Washoe County

Operator:

United States Gypsum Co.

P.O. Box 130

Empire, NV 89405

775-557-2341 Fax: 557-2212

Company employees: 124

Production:

Gypsum - 306,812 tons



Marigold Mine (Mike Visher photo).

#### Florida Canyon Mine (12)

Operator:

Florida Canyon Mining, Inc.

P.O. Box 330

Imlay, NV 89418

775-538-7300 Fax: 538-7324

Company employees: 120 (Included with Standard Mine)

Contract employees: 85

Production:

Gold - 31.916 oz

Silver - 28,152 oz

#### Standard Mine (13)

Operator:

Standard Gold Mining, Inc.

P.O. Box 330

Imlay, NV 89418

775-538-7300 Fax: 538-7324

Company employees: 120 (Included with Florida

Canyon Mine)

Contract employees: 5

Production:

Gold - 11,814 oz

Silver - 24,735 oz

# W. Glen Sexton Family Trust (14)

Operator:

Nutritional Additives Corp.

415 Wellington Street

Winnemucca, NV 89445

775-623-1151 Fax: 623-1153

Company employees: 3

Production:

Dolomite



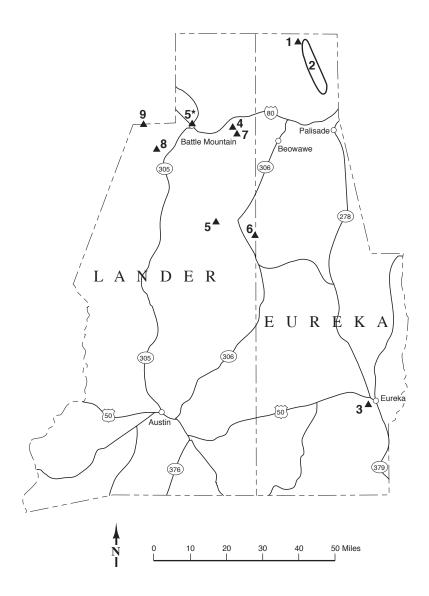
Marigold Mine (Mike Visher photo).



Aerial view of Adams Claim Gypsum Mine (Mike Visher photo).



Turquoise Ridge mine shaft (John Muntean photo).



# **Section III**

# **Eureka County**

#### **Betze-Post Mine (1)**

Operator:

Barrick Goldstrike Mines, Inc.

P.O. Box 29

Elko, NV 89803

775-748-1001 Fax: 748-1240

Company employees: 1,131

Production:

Gold - 1,215,447 oz

Silver - 140,923 oz

# Eastern Nevada Operations (Carlin Operations) (2)

Carlin N, 19 Locations

Carlin S, 6 Locations

Operator:

Newmont Mining Corp.

P.O. Box 669

Carlin, NV 89822

775-778-4000 Fax: 778-4751

Company employees: 2,127

Production:

Gold - 1,322,001 oz

Silver - 268,875 oz

### Ruby Hill Mine (3)

Operator:

Barrick Gold Corporation

P.O. Box 676

Eureka, NV 89316

775-237-6060 Fax: 237-5408

Company employees: 118

Contract employees: 47

Production:

Gold - 142,856 oz.

Silver - 8,368 oz.



Newmont Roaster (Mike Visher photo).

## **Lander County**

#### **Argenta Mine and Mill (4)**

Operator:

Baker Hughes Drilling Fluids P.O. Box 277 Battle Mountain, NV 89820 775-635-5441 Fax: 635-5455 Company employees: 29 Contract employees: 4

Shipped:

Barite - 77.006 tons

# **Battle Mountain Grinding Plant** (Greystone Mine) (5), Mill (5\*)

Operator:

M-I Swaco
P.O. Box 370
Battle Mountain, NV 89820
775-635-5135 Fax: 635-2191
Company employees: 87
Shipped:

Barite - 266,417 tons

#### **Cortez Gold Mines (6)**

Operator:

Cortez Joint Venture HC66 Box 1250 Crescent Valley, NV 89821-1250 775-468-4400 Fax: 468-4496 Company employees: 550

Production:

Gold -534,173 oz Silver - 47,240 oz



### Mule Canyon Mine (7)

Operator:

Newmont Mining Corp.
P.O. Box 388
Valmy, NV 89438
775-635-6423 Fax: 635-6460
Company employees:
included with
Lone Tree Mine
(see page 7)

Production:

Gold - 22,446 oz Silver - 4,565 oz

#### Phoenix Project (8)

Operator:

Newmont Mining Corp.
P.O. Box 388
Valmy, NV 89438
775-635-6423 Fax: 635-6460
Company Employees: 500

Production:

Gold -181,313 oz Silver - 664,787 oz Copper - 10,808,208 pounds

### **Trenton Canyon Mine (9)**

Operator:

Newmont Mining Corp.
P.O. Box 388
Valmy, NV 89438
775-635-6423 Fax: 635-6460
Company Employees:
included with
Lone Tree Mine
(see page 7)

Production:

Gold - 1,768 oz Silver - 360 oz

Phoenix Mine haul truck (D.D. LaPointe photo).



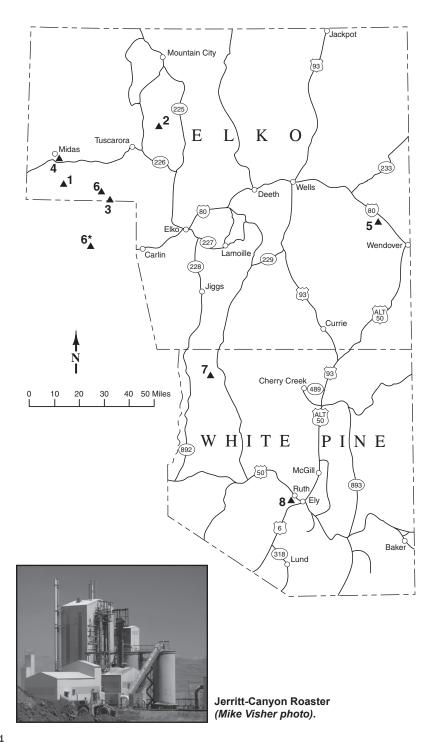
Phoenix Mill flotation cell (D.D. LaPointe photo).



Round Mountain Heaps (Mike Visher photo).



Phoenix Mill (D.D. LaPointe photo).



# **Section IV**

## Elko County

#### Hollister Mine (1)

Operator:

Rodeo Creek Gold, Inc. and Great Basin Gold Inc. P.O. Box 2610 Winnemucca, NV 89446 775-623-5760 Fax: 623-5759 Company employees: 119

Contract employees: 25 *Production:* 

Gold - 4,066 oz Silver - 38,885 oz

#### Jerritt Canyon Mine (2)

Operator:

Queenstake Resources USA, Inc. HC31 Box 78 Elko, NV 89801 775-738-5006 Fax: 758-9231 Company employees: 357

Gold - 121,708 oz Silver - 17.560 oz

#### Meikle Mine (3)

Operator:

Barrick Goldstrike Mines, Inc. P.O. Box 29 Elko, NV 89803 775-738-8043 Fax: 738-6543 Company employees: 703 Contract employees: 216

Production:

Gold - 413,186 oz Silver - 74,000 oz

#### Midas Mine (4)

*Operator:* 

Newmont Mining Corp. HC66 Box 125 Midas, NV 89414 775-635-6423 Fax: 635-6460 Company employees: 220

Production:

Gold - 79,133 oz Silver - 1,040,059 oz

#### Pilot Peak Lime Plant (5)

Operator:

Graymont Western U.S. P.O. Box 2520 West Wendover, NV 89883 775-483-5463 Fax: 483-5149 Company employees: 57

Production:

Limestone, Quicklime, Hydrated lime

# Rossi Mine (6), Dunphy Mill (6\*)-in Eureka County

Operator:

Halliburton
912 Dunphy Ranch Rd.
Battle Mountain, NV 89820
775-468-0515 Fax: 468-2060
Company employee: 45
Contract employees: 26
Shipped: Barite - 230,000 tons

## **White Pine County**

#### **Bald Mountain Mine (7)**

Operator:

Barrick Gold of North America P.O. Box 2706 Elko, NV 89803 775-237-7100 Fax: 237-7101

Company employees: 196

Production:

Gold - 125,998 oz Silver - 21,702 oz

#### **Robinson Mine (8)**

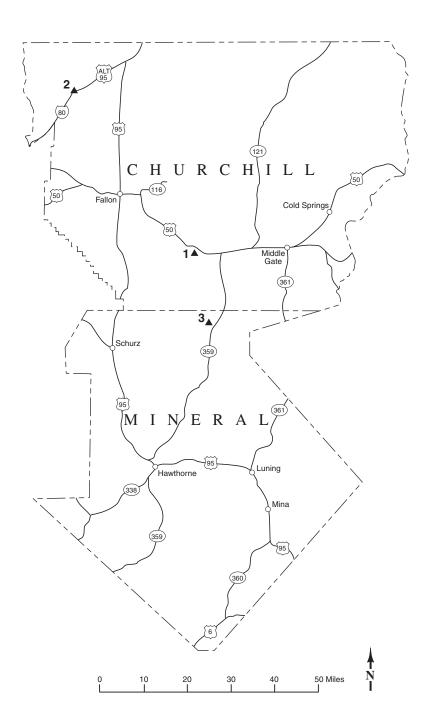
Operator:

Robinson Nevada Mining Company P.O. Box 382 Ruth, NV 89319 775-289-7000 Fax: 289-7104 Company employees: 508

Production:

Copper - 131,986,134 pounds
Gold - 108,118 oz
Silver - 179,238 oz

Molybdenite - 103,491 pounds



# **Section V**

# **Churchill County**

### **Huck Salt Company (1)**

Operator:

Huck Salt Company 2900 Phritzie Ln. Fallon, NV 89406 775-423-2055 Fax: 423-0467 Company employees: 8

Production:

Salt - 15,884 tons

## Moltan Company (2)

Operator:

Moltan Company P.O. Box 860 Fernley, NV 89408 775-423-6668 Fax: 423-6411 Company employees: 50

Production:

Diatomite

# **Mineral County**

Denton-Rawhide Mine (3)

Operator:

Kennecott Rawhide Mining Co. P.O. Box 2070 Fallon, NV 89407 775-945-1015 Fax: 945-1213 Company employees: 17

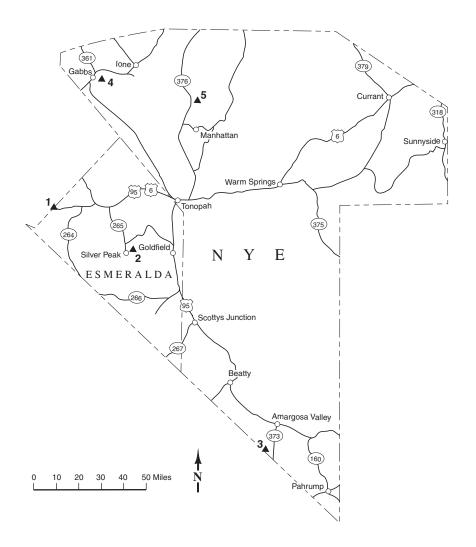
Contract employees: 5

Production:

Gold - 19,597 oz Silver - 160,964 oz



Lithium-rich brine pool at Chemetall Foote (Mike Visher photo).



# Section VI

# Esmeralda County

#### **Basalt Mine and Mill (1)**

Operator:

Grefco Minerals, Inc. 36994 Summit Lake Rd. Burney, CA 96013 775-573-2422 Fax: 573-2422

Company employees: 9

Production:

Diatomite

## Silver Peak Operations (2)

Operator:

Chemetall Foote Corp.
P.O. Box 98
Silver Peak, NV 89047
775-937-2222 Fax: 937-2250
Company employees: 55
Contract employees: 13

Production:

Lithium compounds

# **Nye County**

#### IMV Nevada (3)

Operator:

Mud Camp Mining Co. LLC HC 70 Route Box 549 Amargosa Valley, NV 89020 775-372-5341 Fax: 372-5640 Company employees: 30

Production:

Specialty clays - 28,500 tons

#### **Premier Chemicals (4)**

Operator:

Premier Chemicals, LLC P.O. Box 177 Gabbs, NV 89409 775-285-2601 Fax: 285-4021 Company employees: 90

Production:

Magnesium compounds

### **Smoky Valley Common Operation (5)**

Operator:

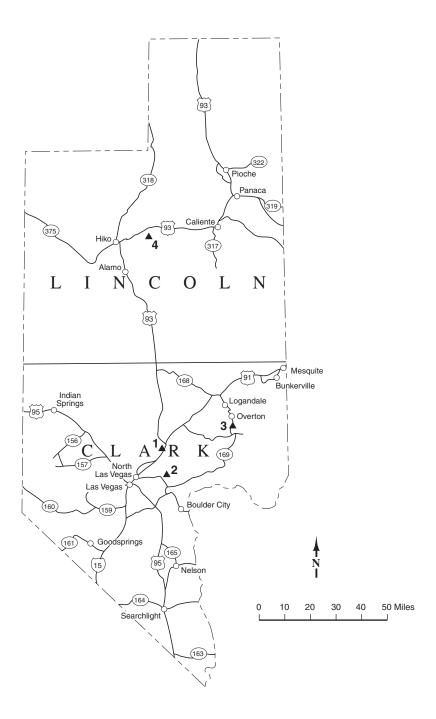
Round Mountain Gold Corp. P.O. Box 480 Round Mountain, NV 89045-0480 775-377-2366 Fax: 377-3224 Company employees: 674 Contract employees: 32

Production:

Gold - 587,445 oz Silver - 955,681 oz



Premier Magnesite (Mike Visher photo).



# **Section VII**

# **Clark County**

### Apex Quarry and Plant (1)

Operator:

Chemical Lime Co.
P.O. Box 363068
North Las Vegas, NV 89036
702-643-7702 Fax: 643-9517
Company employees: 108

Production:

Dolomite, Lime

#### PABCO Gypsum (2)

Operator:

PABCO Building
Products, LLC
P.O. Box 364329
Las Vegas, NV 89036
702-407-3700 Fax: 643-6249
Company employees: 143
Contract employees: 3

Production:

Gypsum - 1,148,642 tons

## Simplot Silica Products (3)

Operator:

J.R. Simplot Company
P.O. Box 308
Overton, NV 89040
702-397-2667 Fax: 397-2798
Company employees: 48
Production:

roduction.

Silica sand - 616,000 tons

# **Lincoln County**

# **Tenacity Perlite Mine and Mill (4)**

Operator:

Wilkin Mining & Trucking, Inc. HC 34 Box 199 Caliente, NV 89008 775-728-4463 Company employees: 7

Production:

Perlite



Chemetall Foote lithium operations on Clayton Valley (Mike Visher photo).

# **SUMMARY OF 2007 PRODUCTION**

0.11	0.007.000	
Gold	6,037,000	ounces
Silver	8,430,000	ounces
Barite (shipped)	573,000	tons
Copper	142,794,000	pounds
Diatomite	N/A	·
Dolomite	N/A	
Limestone	N/A	
Lithium compounds	N/A	
Mercury	N/A	
Molybdenum	309,000	pounds
Perlite	N/A	
Potassium sulfate	N/A	
Precious opal	95	pounds
Quartzite	9,000	tons
Salt	16,000	tons
Silica sand	616,000	tons
Specialty clay	32,000	tons
Turquoise	75	pounds

N/A Not available publicly



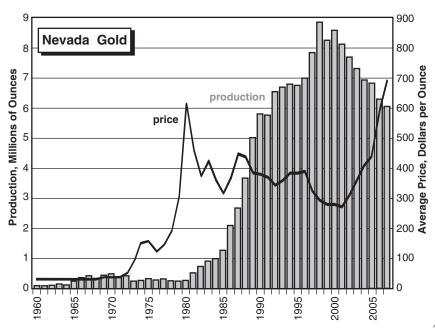
Round Mountain gold (Mike Visher photo).

# **Economic Impacts of Mining in Nevada—2007**

Nevada's mining industry set an all time record in 2007 for total value of all mined commodities. The total value was about \$5.4 billion, a \$0.5 billion increase over 2006. The value was driven by gold, which contributed about \$4.2 billion, based on an average price of \$695 per troy ounce. Nevada led the nation in 2007 in the production of gold, barite, and lithium as it has for several years. Nevada's operations produced a wide variety of other mineral and energy commodities such as aggregates, copper, diatomite, dolomite, geothermal energy, lapidary and gem stones, lime and limestone, magnesium compounds, mercury, molybdenite, oil, perlite, potassium sulfate, salt, silica sand, silver, and specialty aggregates and clavs.

#### **Production Highlights**

Nevada's gold production was 6,037,000 troy ounces in 2007. While the production level is down approximately 4% from 2006. Nevada remains the nation's top gold producer with about 78% of the U.S. total. Underground operations contributed about 18% of the total gold production in 2007. Silver production dropped to 8,430,000 troy ounces in 2007 compared to 8,494,000 in 2006. Copper production increased to 142,794,000 pounds in 2007 compared to 127,554,000 pounds in 2006. Barite production was up slightly to 573,000 tons in 2007 compared to 572,000 tons in 2006. Gypsum production was down to 1,596,000 tons in 2007 compared to 1,930,000 tons in 2006. Molybdenum production was 309,000 pounds contained in 516,000 pounds of molybdenite in 2007 compared to 268,000 pounds of molybdenum in 2006.



#### **Employment**

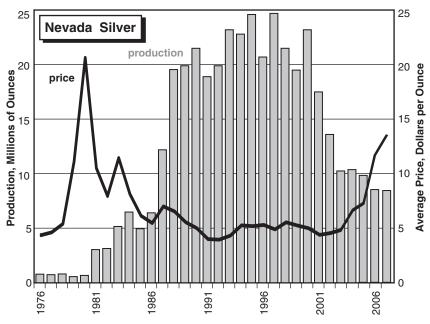
According to the Nevada Department of Employment, Training, and Rehabilitation, the Nevada mining industry employed an average of 12,086 employees in 2007. The average pay for mineral industry employees during this time was \$75,170 per year, the highest average of any employment sector in the state. In addition, it is estimated there are about 52,000 iobs in the state related to providing goods and services needed by the mining industry. Mining employment has been on a rebound for the past 4 years due to more favorable prices for several mineral commodities.

## **Permitting and Reclamation**

Before mining can take place, plans of operation must be submitted and permits must be obtained from federal and state agencies to ensure that resources such as wildlife, air, and water are protected. Nevada and federal laws and regulations require that lands disturbed by mining activities must be rehabilitated so they can be used for other activities once mining is completed. This process, called reclamation, returns mined areas to other productive uses such as livestock grazing, wildlife habitat, or other industrial applications. To ensure that reclamation is done, mine operators are required to post reclamation bonds that are held by government agencies. The bonds are released only after the mined area is stabilized and the reclamation goals have been met. According to the Nevada Division of Environmental Protection, approximately \$1.04 billion in reclamation bonds are currently posted. Mine operators are proud of their efforts and are constantly seeking ways to enhance their reclamation technology.

#### **Gold Reserves**

Nevada's reported gold reserves at or near currently operating mines that can be mined at a profit under current



economic conditions stood at about 72.6 million troy ounces at the end of 2007. The amount of reserves is always in a state of flux, due to some reserves being lost to production, additions of new reserves through new discoveries, and changing economic conditions. The price of gold and the cost of production are the main factors in determining whether a reserve is really a reserve or just a sub-economic resource. Extensive gold resources, not currently economic, are known to exist at or near many operations. An increase in the gold price, with all else being equal, would mean many companies would be able to reclassify their resources into a reserve category. An increase in the cost of regulatory compliance has the same effect as a lowering of the gold price, thus increasingly complex and expensive regulations can reduce reserves. Under current conditions, the existing proven reserves are sufficient to sustain gold production at current levels for about 12 years.

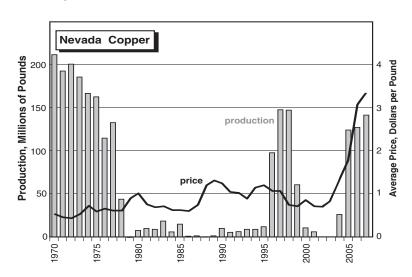
## **Exploration**

Exploration for new deposits, particularly gold, is an ongoing effort by both the operating companies and many others who do not operate mines in the state.

Each year, the Division of Minerals conducts an exploration survey to determine the level of exploration activity and the factors that are responsible for those levels. The respondents to the latest survey indicated they spent \$167.9 million on exploration in Nevada in 2007, up from \$164.9 million in 2006. The respondents reported having 227 geologists on the payroll in 2007. Existence of favorable geology and commodity prices were cited as the most important factors influencing exploration Exploration geologists and the drillers, assayers, and others who support their activities represent a significant positive economic impact, particularly in Nevada's rural areas.

#### Minerals Other Than Gold and Silver

Minerals other than gold and silver are also important to Nevada's economy. Copper ranked second behind gold in terms of value in 2007. Sand, gravel, and crushed stone ranked a close third in terms of value, and are critical to the building of the state's infrastructure. Silver sank to fourth place in 2007. Industrial minerals such as barite, diatomite, dolomite, gypsum, limestone, lithium compounds,



magnesite, molybdenite, perlite, salt, and specialty clays are produced in this state.

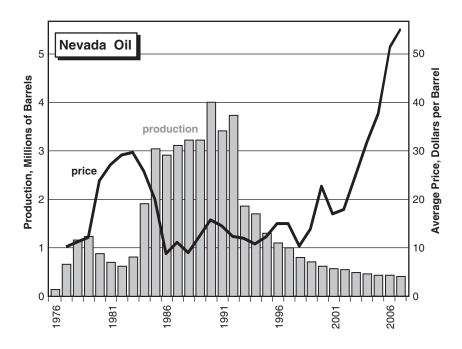
Oil and gas exploration and production are relatively minor when compared to mining, but are nonetheless important to the economy of east-central Nevada. In oil field terms, Nevada is considered a frontier, meaning its potential is yet to be realized. Oil production in 2007 was about 408,000 barrels (42 gallons per barrel).

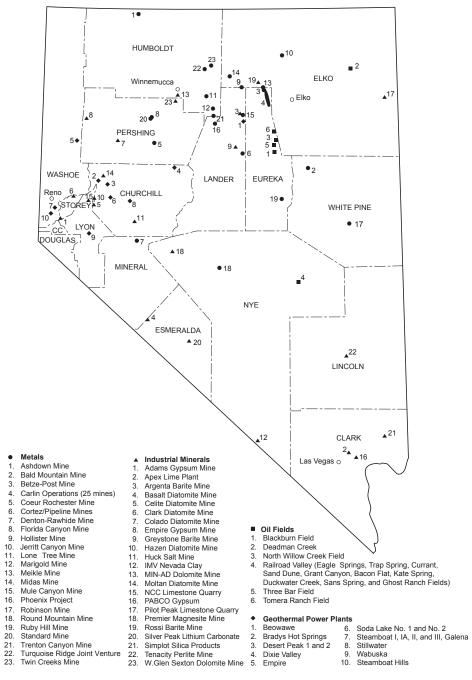
Nevada is rich in geothermal resources and is second only to California in the production of geothermal power. Currently, Nevada has 15 plants that sold approximately 1.2 million megawatt hours of electricity in 2007. This is enough to power about 70,000 typical homes. Geothermal heat is also used for a variety of commercial, domestic and public applications in Nevada. Schools in Elko County and homes in Lincoln

and Washoe Counties are examples of public and private facilities using this renewable energy resource.

#### Conclusion

With a calculated value of about \$5.4 billion, Nevada's mineral industry continued to be a major economic force in the state in 2007. This situation should continue for many years to come. Challenges will exist, as they always have, but Nevada's mineral reserves and the potential to add to them will spur the creativity of the mineral industry. Prices of many mineral commodities have improved in recent years, allowing companies to increase their exploration and development efforts. The continued development of new projects will assure that the mining industry will remain strong in the future.





Major mines, oil fields, and geothermal plants, 2007.

## Index

Adams Claim Gypsum Mine 5 Apex Quarry and Plant 21 Argenta Mine and Mill 12 Ashdown Mine 7 Bald Mountain Mine 15 Basalt Mine and Mill 19 Battle Mountain Grinding Plant 12 Betze-Post Mine 11 Carlin Operations 11 Celite Diatomite Mine 5 Clark Mine and Mill 5 Coeur Rochester Mine 8 Colado Mine, Plant, and Mill 8 Cortez Gold Mines 12 Denton-Rawhide Mine 17 Dunphy Mill 15 Eastern Nevada Operations 11 Empire Mine and Mill 8 Florida Canyon Mine 8 Greystone Mine 12 Hazen Pit 5 Hollister Mine 15 Huck Salt 17 IMV Nevada 19 Jerritt Canyon Mine 15 Lone Tree Mine 7

Marigold Mine 7 Meikle Mine 15 Midas Mine 15 MIN-AD Mine and Mill 7 Moltan Company 17 Mule Canyon Mine 12 NCC Limestone Quarry and Mill 5 PABCO Gypsum 21 Phoenix Project 12 Pilot Peak Lime Plant 15 Premier Chemicals 19 Rainbow Ridge Opal Mines 7 Robinson Mine 15 Rossi Mine 15 Royal Peacock Opal Mine 7 Ruby Hill Mine 11 Silver Peak Operations 19 Simplot Silica Products 21 Smoky Valley Common Operation 19 Standard Mine 8 Tenacity Perlite Mine and Mill 21 Trenton Canyon Mine 12 Turquoise Ridge Joint Venture 7 Twin Creeks Mine 7 W. Glen Sexton Family Trust 8